

In the claims:

1. (currently amended) A method for classifying a remote method invocation from a client system that initiates connections to a remote server object using a client and underlying remote method invocation transport code, the method comprising:

detecting when a connection carrying high value data for the remote method invocation is to be created on a communication channel;

using a custom socket factory to obtain flow information associated with the detected connection, and to generate a socket therefore, the socket having a socket number associated therewith;

using a side channel, different from the communication channel, to communicate flow information, including the socket number, associated with the detected connection to a classifying router prior to remote method invocation establishment of connection; and

incorporating this flow information into a differentiated services classification subsystem of the classifying router by mapping the socket number to a priority associated with the remote invocation to enable proper classification of the remote method invocation when it is later received.

2. (original) The method of claim 1, wherein detecting comprises:
providing a stub to calling applications;

detecting when applications call the stub; and

executing an RMI routine based on a call by an application.

3. (cancelled)

4. (previously presented) The method of claim 1, wherein the side channel is implemented as a servlet.

5. (original) The method of claim 1, wherein incorporating includes:

using the flow information to determine a differentiated services classification for the connection; and

marking traffic delivered to the connection by the classifying router based on the classification.

6. (currently amended) The method of claim 1, further comprising:

detecting an identity of the client making the remote method invocation, the flow information further containing this detected identity, and wherein the priority is related to the detected identity.

7. (currently amended) An apparatus for classifying a remote method invocation from a client system that initiates connections to a remote server object using a client and underlying remote method invocation transport code, the apparatus comprising:

a module configured to detect when a connection carrying high value data for the remote method invocation is to be created;

a module configured to use a custom socket factory to obtain flow information associated with the detected connection, and to generate a socket therefore, the socket having a socket number associated therewith;

a module configured to use a side channel to communicate flow information, including the socket number, associated with the detected connection to a classifying router prior to establishment of the connection; and

a module configured to incorporate this flow information into a differentiated services classification subsystem of the classifying router by mapping the flow information to a priority to enable proper classification of the remote invocation method when the remote method invocation is later invoked ~~connection is established~~.

8. (original) The apparatus of claim 7, wherein the detecting module is further configured to:

provide a stub to calling applications;

detect when applications call the stub; and execute an RMI

routine based on a call by an application.

9. (canceled)

10. (previously presented) The apparatus of claim 7, wherein the side channel is implemented as a servlet.

11. (original) The apparatus of claim 7, wherein the incorporating module is further configured to:

use the flow information to determine a differentiated services classification for the connection; and

mark traffic delivered to the connection by the classifying router based on the classification.

12. (previously presented) The apparatus of claim 7, wherein the side channel module is further configured to detect a identity of the client making the RMI call, the flow information further containing this detected identity.